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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/770,734

02/03/2004

Sheng Dai

1297

9998

24298

7590

03/07/2008

UT-Battelle, LLC
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EXAMINER

HENDRICKSON, STUART L

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

03/07/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/770,734	Applicant(s) DAI ET AL.	
	Examiner Stuart Hendrickson	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 10, 12-35 and 38-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25-35, 39-52 is/are allowed.
- 6) ☒ Claim(s) 1-7, 10, 12-24 and 38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-5 and 10 are rejected under 35 U.S.C. 103(a) as obvious over Lagasse et al. 5902562.

The reference teaches, especially in figs 1 and 3, what appears to be the claimed carbon. While not teaching the distribution, the sharp rise in fig. 3 indicates uniform pore size. The reference teaches optimizing pore sizes (col. 2 bottom); doing so is thus an obvious expedient. See *In re Boesch* 205 USPQ 215.

Claims 1-7 and 10 are rejected under 35 U.S.C. 103(a) as obvious over Peng et al 6024899.

The reference teaches, especially in the examples and col. 6, mesoporous carbon made using porogens. While macropores are not described, it appears that they account for the remaining pore volume. Note also the teaching of optimization of porosity; forming uniform pores is thus an obvious expedient; *In re Boesch supra*.

Claims 1-7 and 10 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Oh et al. 6515845.

The reference teaches a very similar process and makes what appears to be the claimed carbon. Note the figures especially. While not teaching the uniform pore sizes, col. 3 teaches optimization of pore size. Hence the uniform pores are an obvious expedient; *In re Boesch supra*.

Claims 12-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references above, individually, and taken with Taguchi article.

The above references do not teach a chromatography column for mesoporous carbons. However Taguchi does on pg. 1210 middle. Using the carbon of the above references in a

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column is an obvious expedient to exploit its sorption properties. Claim 24 is rejected by the combination with Oh.

Claims 10 and 38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Cancellations have rendered these claims incomplete.

Applicant's arguments filed 2/14/08 have been fully considered but they are not persuasive.

Lagasse fig. 3 triangles show a product having mesopores. Peng and Oh teach optimization of pore sizes, rendering the claims obvious. Other arguments are moot in view of the withdrawal of rejections or are addressed in changes to the text of the rejections.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to examiner Hendrickson at telephone number (571) 272-1351.

/Stuart Hendrickson/

Stuart Hendrickson
examiner Art Unit 1793